A Geometrical Model of The Five Thinking Modes Used in the IT World
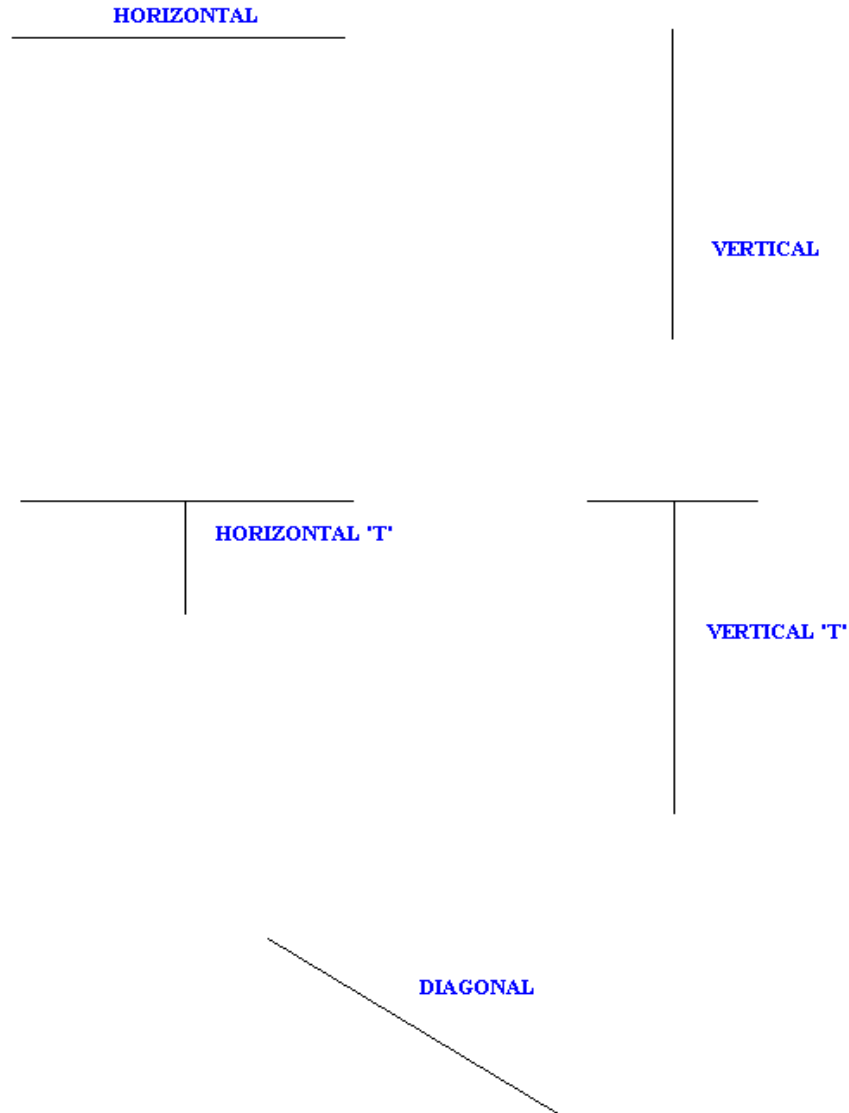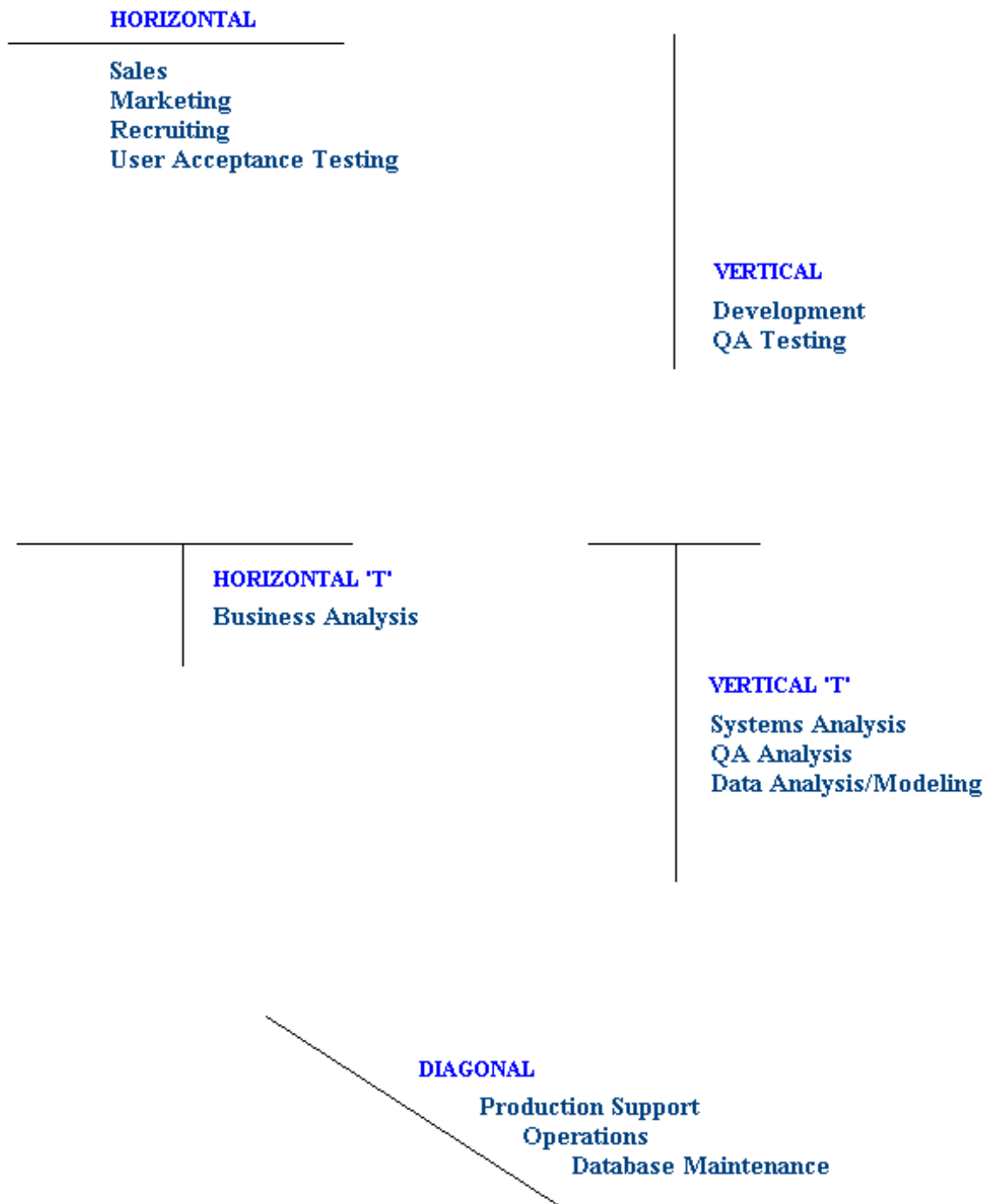
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HORIZONTAL

VERTICAL

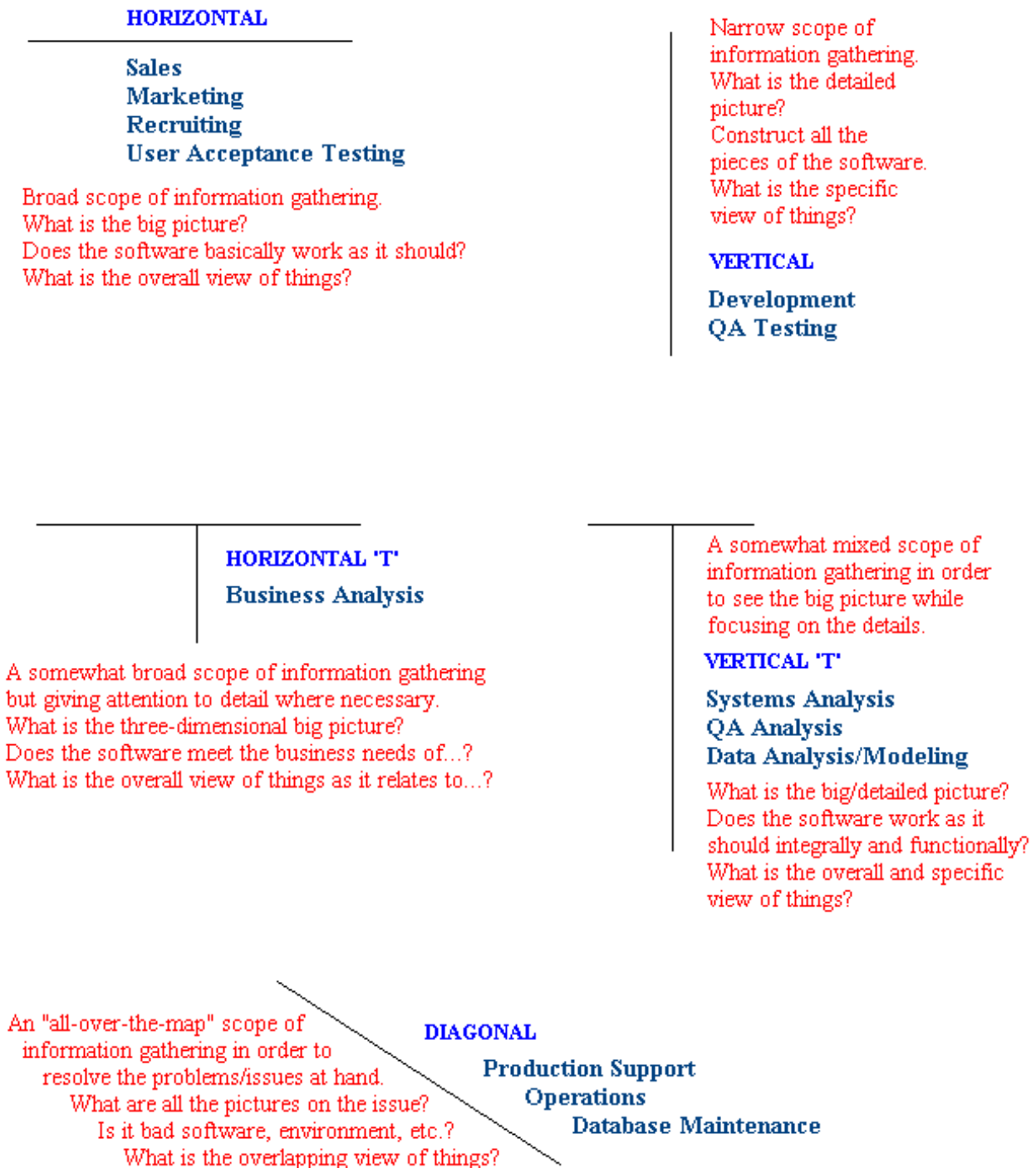HORIZONTAL 'T'

VERTICAL 'T'

DIAGONAL

The horizontal lines represent breadth of thinking; vertical lines represent depth of thinking. From this we can devise five modes of thinking which we'll call Horizontal, Vertical, Horizontal 'T', Vertical 'T', and Diagonal. A person may, of course, be able to demonstrate usage of any of these five thinking modes. But most likely, he/she will have a preference for one particular mode and use it often. Since each thinking mode will flourish in its own particular environment, this factor alone may help determine the person's natural preference for a particular role or assignment in the workplace (depending upon the thinking mode he/she prefers to use.)

IT Roles Dominating the Five Thinking Modes

HORIZONTAL

Sales
Marketing
Recruiting
User Acceptance Testing

VERTICAL

Development
QA Testing

HORIZONTAL 'T'

Business Analysis

VERTICAL 'T'

Systems Analysis
QA Analysis
Data Analysis/Modeling

DIAGONAL

Production Support
Operations
Database Maintenance

Certain IT roles require specific problem solving ability which in turn involves certain ways of thinking. The five thinking modes demonstrate this geometrically by showing the direction(s) in which the person would prefer to go in order to find solutions to problems. Of course, this is speaking in general.

How the Five Thinking Modes Are Used

HORIZONTAL

Sales
Marketing
Recruiting
User Acceptance Testing

Broad scope of information gathering.
What is the big picture?
Does the software basically work as it should?
What is the overall view of things?

Narrow scope of
information gathering.
What is the detailed
picture?
Construct all the
pieces of the software.
What is the specific
view of things?

VERTICAL

Development
QA Testing

HORIZONTAL 'T'

Business Analysis

A somewhat broad scope of information gathering
but giving attention to detail where necessary.
What is the three-dimensional big picture?
Does the software meet the business needs of...?
What is the overall view of things as it relates to...?

A somewhat mixed scope of
information gathering in order
to see the big picture while
focusing on the details.

VERTICAL 'T'

Systems Analysis
QA Analysis
Data Analysis/Modeling

What is the big/detailed picture?
Does the software work as it
should integrally and functionally?
What is the overall and specific
view of things?

An "all-over-the-map" scope of
information gathering in order to
resolve the problems/issues at hand.
What are all the pictures on the issue?
Is it bad software, environment, etc.?
What is the overlapping view of things?

DIAGONAL

Production Support
Operations
Database Maintenance

Notice the directions of thinking that are often used among the various IT roles: a breadth or depth of thinking or variations of both. In general, each person will gravitate to one preferred thinking mode, especially when it is conducive to the task at hand. And so the person will tend to excel at that which he/she is naturally at ease with. Of course, usage of any of the other four thinking modes can be exercised but it may often take great effort, at least initially.

Using the Geometrical Model of the Five Thinking Modes

The following three examples show how knowledge of the geometrical model of the five thinking modes may prove useful:

A recruiter in the IT industry is looking for a specific IT role to fill. He/she does not have to know all the details of the position, of course, but it's always helpful to know if the candidate sought after would have a good chance of successfully performing as the employer/client would expect. In the interview, it could easily become apparent what thinking mode the interviewee prefers to use. If a Horizontal mode is indicated, the person may not want to give full attention to details as needed in, say, QA testing. Perhaps User Acceptance Testing would be a more preferred role for the candidate.

A project manager has an immediate need for someone who can jump into the project and start contributing to it right away. However, the position is a newly created one and difficult to define. Past experience would indicate the skill set of the potential team member, but if the thinking mode that he/she has a preference for matches what the new position may call for, the likelihood of tapping into that person's potential for the new role could be high. This factor would especially be applicable if the technology involved is brand new.

A company is having problems with turnover that is much greater than the industry average. And it may not always be easy to pinpoint the exact reasons for such a situation. However, a contributing factor may be that the staff are working in an environment not conducive to their preferred thinking mode. Re-engineering the work environment so that there is flexibility in how challenges are dealt with may help matters. Team settings are suitable for this. For instance, a worker having a preference for the Horizontal 'T' thinking mode may be struggling with a certain task deadline but finding it difficult to get through all the details. Temporarily "splicing" the task so as to give some of the detail work to another team member who has a preference for the Vertical or Vertical 'T' thinking mode may help diffuse the potential bottleneck.